

Appendix A. Unit Conversion Chart

	English Units	Metric Units	To Convert	Example
Distance	Miles (mi)	Kilometers (km)	1 mi = 1.61 km 1 km = 0.62 mi	3 mi = 4.83 km 3 km = 1.86 mi
Length	Inches (in) Feet (ft)	Centimeters (cm) Meters (m)	1 in = 2.54 cm 1 cm = 0.39 in 1 ft = 0.30 m 1 m = 3.28 ft	3 in = 7.62 cm 3 cm = 1.18 in 3 ft = 0.91 m 3 m = 9.84 ft
Area	Acres (ac) Square Feet (ft ²) Square Miles (mi ²)	Hectares (ha) Square Meters (m ²) Square Kilometers (km ²)	1 ac = 0.40 ha 1 ha = 2.47 ac 1 ft ² = 0.09 m ² 1 m ² = 10.76 ft ² 1 mi ² = 2.59 km ² 1 km ² = 0.39 mi ²	3 ac = 1.20 ha 3 ha = 7.41 ac 3 ft ² = 0.28 m ² 3 m ² = 32.29 ft ² 3 mi ² = 7.77 km ² 3 km ² = 1.16 mi ²
Volume	Gallons (g) Cubic Feet (ft ³)	Liters (L) Cubic Meters (m ³)	1 g = 3.78 l 1 l = 0.26 g 1 ft ³ = 0.03 m ³ 1 m ³ = 35.32 ft ³	3 g = 11.35 l 3 l = 0.79 g 3 ft ³ = 0.09 m ³ 3 m ³ = 105.94 ft ³
Flow Rate	Cubic Feet per Second (ft ³ /sec) ¹	Cubic Meters per Second (m ³ /sec)	1 ft ³ /sec = 0.03 m ³ /sec 1 m ³ /sec = ft ³ /sec	3 ft ³ /sec = 0.09 m ³ /sec 3 m ³ /sec = 105.94 ft ³ /sec
Concentration	Parts per Million (ppm)	Milligrams per Liter (mg/L)	1 ppm = 1 (mg/L) ²	3 ppm = 3 (mg/L)
Weight	Pounds (lbs)	Kilograms (kg)	1 lb = 0.45 kg 1 kg = 2.20 lbs	3 lb = 1.36 kg 3 kg = 6.61 kg
Temperature	Fahrenheit (°F)	Celsius (°C)	°C = 0.55 (F - 32) °F = (C x 1.8) + 32	3 °F = -15.95 °C 3 °C = 37.4 °F

¹ 1 ft³/sec = 0.65 million gallons per day; 1 million gallons per day is equal to 1.55 ft³/sec.

²The ratio of 1 ppm = 1 (mg/L) is approximate and is only accurate for water.

Appendix B. Methods for Bioassessment (Rivers)

River Macroinvertebrate Index (RMI)

The RMI is composed of metrics developed through the Idaho River Ecological Assessment Framework: An Integrated Approach (Grafe 2000)¹. The RMI uses metrics that are composed of five individual metrics as described in Table B-1. These differing metrics categories, using biological community structure (richness), composition, feeding groups and diversity, are developed and tested to reference conditions observed in areas with minimal human disturbance (e.g. wilderness water bodies). Table B-1 shows these metric categories and how they are utilized. Table B-2 shows the metric scoring for each index.

Table B-1. River Macroinvertebrate Index Description

Metric Category	Metric	Definition	Predicted Response to Increasing Disturbance
Richness	Number of Taxa	Number of distinct taxa in assemblage	Decrease
	Number of EPT ^a	Number of distinct mayflies, stoneflies and caddisflies in assemblage	Decrease
Composition	Percent Elmidae	Percent of sample that is riffle beetle	Decrease
Feeding Group	Percent Predators	Percent of sample that is taxa that preys on other macroinvertebrates	Decrease
Diversity	Percent Dominant Taxon	Percent of sample in the most abundant taxa	Increase

^a Ephemeroptera, Plecoptera and Trichoptera

Table B-2. River Macroinvertebrate Index Descriptive Statistics and Scoring Range

Metric	Minimum	Maximum	Scoring		
			5	3	1
Number of Taxa	19	33	>23	19-22	<19
Number of EPT ^a Taxon	9	22	>17	9-16	,17
Percent Elmidae	0.2	6.3	>1.7	0.2-1.6	<1.6
Percent Predators	19.0	37.0	<37	38-59	>59
Percent Dominant Taxon ^b	3.4	15.0		>3.4	<3.4

^a Ephemeroptera, Plecoptera and Trichoptera

^b the weak discriminatory power of this metric allowed for only two scores

Based on the scoring mechanism shown in Table B-2, the highest possible score obtainable would be 23, while the lowest would be 5. These values are then evaluated in an overall category rating when combined with at least one other bioassessment tool (e.g. river fish index, river diatom index) an overall category rating is established. Further

discussion on the overall category rating will follow. Table B-3 shows the final scoring used to determine the category rating.

Table B-3. River Macroinvertebrate Index Rating and Category Rating Score

Metric	Below Minimal Threshold	Category Rating "1"	Category Rating "2"	Category Rating "3"
RMI ^a Score	<11	11-13	14-16	>16

a River Macroinvertebrate Index

Table B-4 through B- 8 show the final results for the RMI scores and category rating obtained on the Weiser River monitoring sites during the period from August 2001 through October 2001.

Table B-4. River Macroinvertebrate Index Scores. Weiser River at Highway 95 Bridge at Weiser, Idaho. Lower Weiser River, Galloway Dam to Snake River.

Metric	August 2001 Metric Result	August 2001 RMI ^a Metric Score	October 2001 Metric Result	October 2001 RMI Metric Score
Number of Taxa	29	5	36	5
Number EPT ^b Taxa	11	3	6	1
Percent Elmidae	0.38%	3	2.17%	5
Percent Dominate Taxa	1.52%	5	15.87%	5
Percent Predators	0.76%	1	2.17%	1
Total RMI Index Score		17		17
Condition Rating		3		3

a River Macroinvertebrate Index RMI Score

b Ephemeroptera-Plecoptera-Trichoptera

Table B-5. River Macroinvertebrate Index Scores. Weiser River at Unity Bridge near Weiser, Idaho. Weiser River, Galloway Dam to Snake River.

Metric	August 2001 Metric Result	August 2001 RMI ^a Metric Score	October 2001 Metric Result	October 2001 RMI Metric Score
Number of Taxa	27	5	29	5
Number EPT ^b Taxa	13	3	11	3
Percent Elmidae	4.87%	5	4.12%	5
Percent Dominate Taxa	1.69%	5	1.37%	5
Percent Predators	1.69%	1	2.55%	1
Total RMI Index Score		19		19
Condition Rating		3		3

a River Macroinvertebrate Index RMI Score

b Ephemeroptera-Plecoptera-Trichoptera

Table B-6. River Macroinvertebrate Index Scores. Weiser River at Galloway Dam.

Metric	August 2001 Metric Result	August 2001 RMI^a Metric Score	October 2001 Metric Result	October 2001 RMI Metric Score
Number of Taxa	36	5	32	5
Number EPT ^b Taxa	20	5	17	3
Percent Elmidae	12.36%	5	15.21%	5
Percent Dominate Taxa	18.44%	5	13.91%	5
Percent Predators	7.22%	3	5.01%	3
Total RMI Index Score		23		21
Condition Rating		3		3

*a River Macroinvertebrate Index RMI Score**b Ephemeroptera-Plecoptera-Trichoptera*

Table B-7. River Macroinvertebrate Index Scores, Weiser River above Crane Creek near Weiser, Idaho, and above Midvale, Idaho.

Metric	Above Crane Creek August 2001 Metric Result	Above Crane Creek August 2001 RMI^a Metric Score	Above Midvale August 2001 Metric Result	Above Midvale August 2001 RMI Metric Score
Number of Taxa	35	5	32	5
Number EPT ^b Taxa	20	5	16	3
Percent Elmidae	6.66%	5	4.94%	5
Percent Dominate Taxa	1.33%	5	14.99%	5
Percent Predators	4.66%	3	6.92%	3
Total RMI Index Score		23		21
Condition Rating		3		3

*a River Macroinvertebrate Index, RMI Score**b Ephemeroptera-Plecoptera-Trichoptera*

Table B-8. River Macroinvertebrate Index Scores. Weiser River, West Fork Weiser River to Little Weiser River.

Metric	Weiser River at Council Metric Result	Weiser River at Council RMI^a Metric Score	Weiser River at Goodrich Metric Result	Weiser River at Goodrich RMI Metric Score
Number of Taxa	42	5	27	5
Number EPT ^b Taxa	32	5	17	5
Percent Elmidae	3.08%	5	8.22%	5
Percent Dominate Taxa	19.08%	5	1.76%	5
Percent Predators	4.62%	3	1.96%	1
Total RMI Index Score		23		21
Condition Rating		3		3

*a River Macroinvertebrate Index, RMI Score**b Ephemeroptera-Plecoptera-Trichoptera*

River Diatom Index (RDI)

The RDI is composed of metrics developed through the Idaho River Ecological Assessment Framework: An Integrated Approach (Grafe 2000)¹. The RDI uses metrics that are composed of nine individual metrics as described in Table B-9. These differing metrics categories, using biological community pollution tolerance groups (sensitivity), species eutrophic composition, mobility and abnormalities are developed and tested to reference conditions observed in areas with minimal human disturbance (e.g. wilderness water bodies). Table B-9 shows these metric categories and how they are utilized. Table B-10 shows the metric scoring for each index.

Table B-9. River Diatom Index Description

Metric Category	Metric	Definition	Predicted Response to Increasing Disturbance
Tolerance and Intolerance	Percent Sensitive	Percent of species identified as sensitive to pollutants (organic, salts, temperature, sediment, toxics, high nutrients and unstable substrate)	Decrease
	Percent Very Tolerant	Percent of species identified as highly tolerant to pollutants (organic, salts, temperature, sediment, toxics, high nutrients and unstable substrate)	Increase
Autoecological Guild	Eutrophic Species Richness	Number of species identified as high inorganic or organic tolerant	Increase
	Percent Nitrogen Heterotrophs	Percent of species identified as non-nitrogen fixers	Increase
	Percent Polysaprobic	Percent of species identified as tolerant of high organic load	Increase
	Alkaliphilic Species Richness	Number of species identified as tolerant of salts	Increase
	Percent High Oxygen	Percent of species identified as requiring high dissolved oxygen levels	Decrease
Morphometric Guild	Percent Very Motile	Percent of species identified as tolerant of sediments	Increase
Individual Condition	Percent Deformed Cells	Percent of deformed cells in samples (usually associated with metals)	Increase

Table B-10. River Diatom Index Descriptive Statistics and Scoring Range

Metric	Scoring		
	1	3	5
Percent Sensitive	<60	60-80	>80
Percent Very Tolerant	>15	3-15	<3
Eutrophic Species Richness	>20	12-20	<12
Percent Nitrogen Heterotrophs	>20	7-20	<7
Percent Polysaprobic	>10	5-10	<5
Alkaliphilic Species Richness	>30	18-30	<18
Percent High Oxygen	<25	25-55	>55
Percent Very Motile	>25	7-25	<7
Percent Deformed Cells	>1	0-1	0

Based on the scoring mechanism shown in Table B-10, the highest possible score obtainable would be 45, while the lowest would be 9. These values are then evaluated in an overall category rating when combined with at least one other bioassessment tool (e.g. river fish index, river diatom index) an overall category rating is established. Further discussion on the overall category rating will follow. Table B-11 shows the final scoring used to determine the category rating.

Table B-11. River Diatom Index Rating and Category Rating Score

Metric	Below Minimal Threshold	Category Rating "1"	Category Rating "2"	Category Rating "3"
RDI ^a Score	NA ^b	<22	22-33	>34

a River Diatom Index

b No minimal threshold identified

Table B-12 through B-16 show the final results for the RDI scores and category rating obtained on the Weiser River monitoring sites during the period from August 2001 through October 2001.

Table B12. River Diatom Index Scores. Weiser River, Galloway Dam to the Snake River.

Metric	Weiser River at Highway 95 Bridge at Weiser, Idaho (Metric Score)	Weiser River at Highway 95 Bridge at Weiser, Idaho (RDI^a Score)	Weiser River at Unity Bridge (Metric Score)	Weiser River at Unity Bridge (RDI Score)	Weiser River below Galloway Dam (Metric Score)	Weiser River below Galloway Dam (RDI Score)
% Pollutant Intolerant	32.3%	1	22.9%	1	28.9%	1
% Pollutant Tolerant	15.9%	1	27.2%	1	16.5%	1
Eutrophic Taxa Richness	26	1	25	1	24	1
% Nitrogen Heterotrophs	36.1%	1	52.1%	1	38.2%	1
% Polysaprobic	18.3%	1	28.4%	1	22.7%	1
Alkaliphilic Taxa Richness	33	1	28	3	29	3
% Requiring High Oxygen	5.2%	1	7.4%	1	10.3%	1
% Very Motile	27.8%	1	21.4%	3	35.5%	1
% Deformed	0%	5	0%	5	0%	5
Final River Diatom Index (RDI) Score		13		17		15
River Diatom Index (RDI) Condition Rating		1		1		1

^a River Diatom Index RDI Score

Table B-13. River Diatom Index Scores. Weiser River, Little Weiser River to Galloway Dam.

Metric	Weiser River below Galloway Dam Metric Score	Weiser River below Galloway Dam RDI^a Score	Weiser River above Crane Creek Metric Score	Weiser River above Crane Creek RDI Score
% Pollutant Intolerant	28.9%	1	46.9%	1
% Pollutant Tolerant	16.5%	1	5.7%	3
Eutrophic Taxa Richness	24	1	24	1
% Nitrogen Heterotrophs	38.2%	1	28.2%	1
% Polysaprobic	22.7%	1	19.2%	1
Alkaliphilic Taxa Richness	29	3	28	3
% Requiring High Oxygen	10.3%	1	6.4%	1
% Very Motile	35.5%	1	25.7%	1
% Deformed	0%	5	0%	5
Final River Diatom Index (RDI) Score		15		17
Final Condition Category Rating		1		1

^a River Diatom Index,

Table B-14. River Diatom Index Scores. Weiser River, Little Weiser River to Galloway Dam.

Metric	Weiser River above Midvale Metric Score	Weiser River above Midvale RDI Score	Weiser River below Little Weiser River Metric Score	Weiser River below Little Weiser River RDI Score
% Pollutant Intolerant	60.3%	3	53.4%	1
% Pollutant Tolerant	9.7%	3	11.1%	3
Eutrophic Taxa Richness	16	3	21	1
% Nitrogen Heterotrophs	19.5%	3	21.7%	1
% Polysaprobic	10.0%	1	17%	1
Alkaliphilic Taxa Richness	21	3	23	3
% Requiring High Oxygen	8.2%	1	11.3%	1
% Very Motile	28%	1	25.1%	1
% Deformed	0%	5	0%	5
Final River Diatom Index (RDI) Score		23		17
Final Condition Category Rating		2		1

a River Diatom Index,

Table B-15. River Diatom Index Scores. Weiser River, West Fork Weiser River to Little Weiser River.

Metric	Weiser River at Council Metric Score	Weiser River at Council RDI^a Score	Weiser River at Goodrich Metric Score	Weiser River at Goodrich RDI Score
% Pollutant Intolerant	51.7%	1	51.3%	1
% Pollutant Tolerant	2.8%	1	13.2%	3
Eutrophic Taxa Richness	18	5	24	1
% Nitrogen Heterotrophs	5.3%	3	12.9%	3
% Polysaprobic	27.5%	5	15.8%	1
Alkaliphilic Taxa Richness	24	1	30	3
% Requiring High Oxygen	5.6%	3	13.0%	1
% Very Motile	15.4%	3	27.5%	1
% Deformed	0%	5	0%	5
Final River Diatom Index Score		27		19
Final Condition Category Rating		2		1

^a River Diatom Index.

Table B-16. River Diatom Index Scores. Crane Creek, Crane Creek Reservoir to Weiser River.

Metric	Crane Creek below Crane Creek Reservoir RDI^a Metric Score	Crane Creek below Crane Creek Reservoir RDI Score
% Pollutant Intolerant	4.9%	1
% Pollutant Tolerant	71.5%	1
Eutrophic Taxa Richness	13	2
% Nitrogen Heterotrophs	15.9%	3
% Polysaprobic	7.2%	3
Alkaliphilic Taxa Richness	24	3
% Requiring High Oxygen	67.6%	5
% Very Motile	15.7%	3
% Deformed	0.0%	5
Final River Diatom Index (RDI) Score		26
Final Condition Category Rating		2

^a River Diatom Index

River Fish Index (RFI)

The RFI is composed of metrics developed through the Idaho River Ecological Assessment Framework: An Integrated Approach (Grafe 2000)¹. The RFI uses metrics that is composed of nine individual metrics as described in Table B-17. These differing metrics categories, using biological community pollution tolerance groups (sensitivity), species eutrophic composition, mobility and abnormalities are developed and tested to reference conditions observed in areas with minimal human disturbance (e.g. wilderness water bodies). Table B-18 shows how these metric categories, and how they are utilized. Table B-19 shows the metric scoring calculations for each index.

Metric Category	Metric	Definition	Predicted Response to Increasing Disturbance
Assemblage Richness and Composition	Cold water native species	Direct evaluation of native cold water species	Decrease
	Percent cold water	Percent of total native and introduced cold water species found in sample set	Decrease
Indicator Species	Percent tolerant individuals	Percent of sample determined to be pollutant tolerant (Zaroban 1999)	Increase
	# Non-indigenous species	Total number of non-native species found	Increase
	Percent carp	Percent of sample with highly pollutant tolerant specie	Increase
	Percent sculpin	Percent of sample requiring high dissolved oxygen levels and clean silt free substrate	Decrease
Reproduction Function	# Trout age classes	Evaluates the age class of trout and spawning success	Decrease
	# Sculpin age classes	Evaluates the age class of sculpin and habitat conditions	Decrease
# Cold water fish captured per minute of electrofishing	# Cold water fish captured per minute of electrofishing	Evaluates the abundance of trout species per sampling event	Decrease
Anomalies	Anomalies	Evaluates associated toxic pollutants	Increase

Table B-17. River Fish Index Description

Table B-18. River Fish Index Scoring Description.

Cold water native species	$f(x) = 3.333333E-1 \cdot x$						
Percent sculpin	$f(x) = 6.666667E-2 \cdot x$						
# Sculpin age classes	# Ages	0	1	2	3	4	>4
	Score	0	0.05	0.3	0.75	0.925	1
Percent cold water	$f(x) = 1.428571E-2 \cdot x$						
Percent sensitive native individuals	$f(x) = 2.475072E-6 \cdot x^3 + -5.387238E-4 \cdot x^2 + 3.911333E-2 \cdot x + 1.423585E-2$						
Percent tolerant individuals	$f(x) = (9.877495E-1 - 6.500219E-3) / (1 + (x / 4.026224E+1)^{7.230386E+0}) + 6.5E-3$						
# Non-indigenous species	# Species	0	1	2	3	4	>4
	Score	1	0.5	0.25	0.0625	0.004	0
# Cold water fish captured per minute of electrofishing	$f(x) = 1.476804E-2 \cdot x^3 + -1.551539E-1 \cdot x^2 + 6.421866E-1 \cdot x + -2.253135E-2$						
Anomalies	$f(x) = 1 \cdot \exp(-6.907755E-1 \cdot x)$						
# Trout age classes	# Ages	0	1	2	3	4	>4
	Score	0	0.1	0.5	0.875	1	1
Presence of carp	$f(x) = \exp(-6.907755E-1 \cdot x)$						

Metric (x)	f(x) Metric score						
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Based on the scoring mechanism shown in Table B-18, the highest and lowest possible scores are dependent on input from the sampling effort. These values are then evaluated in an overall category rating when combined with at least one other bioassessment tool (e.g. river fish index, river diatom index) an over all category rating is established. Further discussion on the overall category rating will follow. Table B-19 shows the final scoring used to determine the category rating.

Table B-19. River Fish Index Rating and Category Rating Score

Metric	Below Minimal Threshold	Category Rating "1"	Category Rating "2"	Category Rating "3"
RFI ^a Score	<54	54-69	70-75	>75

^a River Fish Index

Table B-20 through B-22 show the results from the 1999 Idaho Department of Fish and Game sampling effort. Raw data provided by the Department is available in Appendix C. Tables B-23 through B-27 shows the final fish data scoring.

Table B-20. Number and Percentage of Fish Species in the Weiser River at Weiser, Idaho. July 1999. Weiser River, Galloway Dam to the Snake River.

Species Found	Weiser River near Weiser, Idaho		Weiser River below Galloway Dam	
	Count	Percent of Total	Count	Percent of Total
Bridgelip sucker	17	26.2%	24	8.5%
Channel catfish	1	1.5%	0	0.0%
Chiselmouth mouth	16	24.6%	55	19.4%
Largescale sucker	1	1.5%	41	14.5%
Mountain whitefish	9	13.8%	26	9.2%
Northern pike minnow	2	3.1%	46	16.3%
Smallmouth bass	18	27.7%	55	19.4%
Speckled dace	1	1.5%	2	0.7%
Common carp	0	0.0%	13	4.6%
Longnose dace	0	0.0%	5	1.8%
Redside shiner	0	0.0%	14	4.9%
Redband trout	0	0.0%	2	0.7%
Sculpin	0	0.0%	0	0.0%
Rainbow trout	0	0.0%	0	0.0%
Mountain sucker	0	0.0%	0	0.0%
Total Number	65	100%	283	100%

Table B-21. Species Count and River Fish Index Scores, Weiser River Lower Canyon Section, Upper Canyon Section, and Near Midvale, Idaho.

Species Found	Weiser River, Lower Canyon		Weiser River, Upper Canyon		Weiser River near Midvale, Idaho	
	Count	Percent of Total	Count	Percent of Total	Count	Percent of Total
Bridgelip sucker	9	6.0%	22	8.7%	5	3.8%
Channel catfish	0	0.0%	0	0.0%	0	0.0%
Chiselmouth mouth	7	4.7%	31	12.3%	17	12.9%
Largescale sucker	7	4.7%	50	19.8%	29	22.0%
Mountain whitefish	3	2.0%	9	3.6%	7	5.3%
Northern pike minnow	20	13.4%	47	18.6%	22	16.7%
Smallmouth bass	65	43.6%	54	21.3%	7	5.3%
Speckled dace	0	0.0%	7	2.8%	2	1.5%
Common carp	9	6.0%	1	0.4%	0	0.0%
Longnose dace	0	0.0%	4	1.6%	1	0.8%
Redside shiner	22	14.8%	10	4.0%	38	28.8%
Redband trout	5	3.4%	10	4.0%	4	3.0%
Sculpin	2	1.3%	8	3.2%	0	0.0%
Rainbow trout	0	0.0%	0	0.0%	0	0.0%
Mountain sucker	0	0.0%	0	0.0%	0	0.0%
Total Number	149	100%	253	100%	132	100%

Table B-22. Presence/Absence of Fish Species. Weiser River, West Fork Weiser River to Little Weiser River.

Weiser River at Cambridge June 1999		
Species Found	Count	Percent of Total
Bridgelip sucker	15	3.5%
Channel catfish	0	0.0%
Chiselmouth mouth	31	7.3%
Largescale Sucker	114	26.9%
Mountain whitefish	74	17.5%
Northern pike minnow	51	12.0%
Smallmouth bass	4	0.9%
Speckled dace	0	0.0%
Common carp	0	0.0%
Longnose dace	0	0.0%
Redside shiner	93	21.9%
Redband trout	40	9.4%
Sculpin	0	0.0%
Rainbow trout	1	0.2%
Mountain succor	1	0.2%
Total Number	424	100%

Table B-23. River Fish Index Input Values

Stream	Site	#trout	# scul	Total fish	Total species	Native species (USNK)	Native species (LSNK)	#Sens N Ind(1)	#Sens N Ind(2)	#Cold Nat. Ind(1)
Weiser River at Weiser	WR-001	0	0	64	7	5	5	0	0	9
Weiser River below Galloway Dam	WR-002	2	0	285	11	8	9	0	2	26
Weiser River Canyon	WR-004	0	2	149	10	6	7	0	0	8
Weiser River Upper Canyon	WR-005	10	8	253	12	8	9	0	10	9
Weiser River @ Midvale	WR-005U	4	0	133	10	8	9	0	4	7
Weiser River Cambridge	WR-005C	41	1	424	10	7	8	0	41	75

Table B-23 (Continued). River Fish Index Input Values

Stream	Site	#Cold Nat. Ind(2)	# Cold Indiv	#Tot Ind	#Alien Ind	#Cold Nat. Ind(1)	#Cold Nat. Ind(2)	# Cold Indiv	#Tot Ind	#Alien Ind
Weiser River at Weiser	WR-001	9	9	21	19	9	9	9	21	19
Weiser River below Galloway Dam	WR-002	28	28	125	72	26	28	28	125	72
Weiser River Canyon	WR-004	8	8	45	74	8	8	8	45	74
Weiser River Upper Canyon	WR-005	19	19	120	65	9	19	19	120	65
Weiser River @ Midvale	WR-005U	11	11	57	11	7	11	11	57	11
Weiser River Cambridge	WR-005C	116	115	180	45	75	116	115	180	45

Table B-23 (Continued). River Fish Index Input Values

Stream	Site	#Alien Ind(2)	# Alien Sp (1)	# Alien Sp (2)	#Cold Nat Spec	#Cold Nat Sp (2)	% Trout	% Salm.	% Cato.
Weiser River at Weiser	WR-001	19	2	2	1	1	0	14	28
Weiser River below Galloway Dam	WR-002	70	3	2	1	2	1	10	23
Weiser River Canyon	WR-004	74	2	2	2	2	0	5	11
Weiser River Upper Canyon	WR-005	55	3	2	1	2	4	8	28
Weiser River @ Midvale	WR-005U	7	2	1	1	2	3	8	26
Weiser River Cambridge	WR-005C	4	3	1	2	4	10	27	30

Table B-24. Final RFI Scoring Data and Results

Water Body	Site	River Basin	# Cold native sp	#Sculpin age classes	Sculpin (%)	Metric Raw Values			# Non indig sp.	Carp (%)	# Salmonid age classes	CPUE (Cold ind/min)
						% Sen Nat Ind	% Cold Ind	% Tol Ind				
Weiser River at Weiser	WR-001	LSNK	1	0	0.00	0.00	14.06	32.81	2.00	0.00	0	1.00
Weiser River below Galloway Dam	WR-002	LSNK	2	0	0.00	0.70	9.82	43.86	2.00	4.91	2	3.11
Weiser River Canyon	WR-004	LSNK	2	1	1.34	0.00	5.37	30.20	2.00	6.04	1	0.89
Weiser River Upper Canyon	WR-005	LSNK	2	1	3.16	3.95	7.51	47.43	2.00	0.40	1	2.11
Weiser River @ Midvale	WR-005U	LSNK	2	0	0.00	3.01	8.27	42.86	1.00	0.00	1	1.22
Weiser River Cambridge	WR-005C	LSNK	4	1	0.24	9.67	27.12	42.45	1.00	0.00	1	12.78

Table B-24 (Continued). Final RFI Scoring Data and Results

	% DELT anom	#Coldwater Native Species	# Sculpin age classes (if missing, % sculpin)	% Sensitive native individuals	Calculated Metric Scores			% Carp	# Salmonid age classes	CPUE (#cold indiv/min electrofish)
					% Cold Individuals	% Tolerant individuals	# Non-indigenous species			
Weiser River at Weiser	0	0.33	0	0.00	0.20	0.81	0.25	1.00	0	0.5
Weiser River below Galloway Dam	0	0.67	0	0.04	0.14	0.35	0.25	0.03	0.5	0.9
Weiser River Canyon	0	0.67	0.05	0.00	0.08	0.88	0.25	0.02	0.1	0.4
Weiser River Upper Canyon	0	0.67	0.05	0.16	0.11	0.24	0.25	0.76	0.1	0.8
Weiser River @ Midvale	0	0.67	0	0.13	0.12	0.39	0.5	1.00	0.1	0.6
Weiser River Cambridge	0	1.00	0.05	0.34	0.39	0.40	0.5	1.00	0.1	1.0

Table B-24 (Continued). Final RFI Scoring Data and Results

	% Anomalies	River Fish Index RFI Score	River Fish Index RFI Condition Rating
Weiser River at Weiser	1	40.7	Below Minimum Threshold
Weiser River below Galloway Dam	1	39.0	Below Minimum Threshold
Weiser River Canyon	1	34.7	Below Minimum Threshold
Weiser River Upper Canyon	1	41.1	Below Minimum Threshold
Weiser River @ Midvale	1	44.6	Below Minimum Threshold
Weiser River Cambridge	1	57.9	1